

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below.

- 1.(Previously presented) A coating composition curable upon exposure to both ultraviolet radiation and thermal energy, the composition comprising
 - (a1) a radiation curable component which polymerizes upon exposure to ultraviolet radiation, comprising
 - (a11) at least two functional groups comprising at least one bond activatable upon exposure to ultraviolet radiation, and
 - (a12) one or more isocyanate-reactive functional groups,
 - (a2) a thermally curable binder component which polymerizes upon exposure to heat, consisting of one or more oligomers or polymers having
 - (a21) at least two isocyanate-reactive functional groups, and
 - (a22) substantially no functional groups having bonds activatable upon exposure to ultraviolet radiation, andno more than 5% by weight of aromatic ring structures, based on the nonvolatile weight of thermally curable binder component (a2), and
 - (a3) a crosslinking component consisting of one or more compounds comprising at least 2.0 isocyanate groups per molecule and that are substantially free of functional groups having bonds activatable upon exposure to ultraviolet radiation,wherein the ratio of NCO groups to the sum of isocyanate-reactive functional groups (a12) and (a21) is less than 1.30.
- 2.(Original) The coating composition of claim 1, wherein the ratio of NCO groups to the sum of isocyanate-reactive functional groups (a12) and (a21) is from 0.50 to 1.25.
- 3.(Original) The coating composition of claim 2 wherein the ratio of NCO groups to the sum of isocyanate-reactive functional groups (a12) and (a21) is from 0.75 to 1.10.
- 4.(Original) The coating composition of claim 1 wherein the ratio of NCO groups to the sum of isocyanate-reactive functional groups (a12) and (a21) is less than 1.00.

5.(Original) The coating composition of claim 3 wherein the ratio of NCO groups to the sum of isocyanate-reactive functional groups (a12) and (a21) is from 0.75 to 1.00.

6.(Original) The coating composition of claim 1 wherein isocyanate-reactive functional groups (a12) and (a21) are hydroxyl groups.

7.(Original) The coating composition of claim 1 wherein the thermally curable binder component (a2) has a polydispersity of less than 4.0.

8.(Original) The coating composition of claim 7 wherein the thermally curable binder component (a2) has a polydispersity of less than 3.5.

9.(Original) The coating composition of claim 8 wherein the thermally curable binder component (a2) has a polydispersity of from 1.5 to less than 3.5.

10.(Original) The coating composition of claim 9 wherein the thermally curable binder component (a2) has a polydispersity of from 1.75 to less than 3.0.

11.(Original) The coating composition of claim 1 wherein the thermally curable binder component (a2) is selected from the group consisting of polyesters, epoxy functional materials, acrylics, and mixtures thereof.

12.(Original) The coating composition of claim 7 wherein thermally curable binder component (a2) is a polyester.

13.(Canceled) The coating composition of claim 1 wherein thermally curable binder component (a2) has no more than 5% by weight of aromatic ring structures, based on the nonvolatile weight of thermally curable binder component (a2).

14.(Currently Amended) A method of making a coated substrate, comprising

applying the coating composition of claim 1 to a substrate to provide a coated substrate, and

subjecting the coated substrate to curing to provide a cured coated substrate, said curing being at least one of the group consisting of radiation curing, thermal curing and mixtures thereof.

15.(Currently Amended) The method of claim 14 wherein the step of curing comprises subjecting the coated substrate to ultraviolet radiation to provide an ultraviolet cured coated substrate.

16.(Currently Amended) The method of claim 15 further comprising subjecting the ultraviolet cured coated substrate to thermal curing to provide an ultraviolet and thermally cured coated substrate.

17.(Original) The method of claim 14 wherein the substrate comprises a plastic.

18.(Original) The method of claim 17 wherein the plastic substrate is a fiber-reinforced plastic substrate.

19.(Previously Presented) The method of claim 17 wherein the plastic substrate is fiber reinforced sheet molded compound or fiber reinforced bulk molded compound.

20.(Currently Amended) The method of claim 15 further comprising,
coating the ultraviolet cured coated substrate with one or more coating compositions to provide a coated ultraviolet cured coated substrate, and
curing the coated ultraviolet cured coated substrate to provide a cured coated ultraviolet cured coated substrate.

21.(Currently Amended) The method of claim 16 further comprising,

coating the ultraviolet and thermally cured coated substrate with one or more coating compositions to provide a coated ultraviolet and thermally cured coated substrate, and

curing the coated ultraviolet and thermally cured coated substrate to provide a cured coated ultraviolet and thermally cured coated substrate.

22.(Currently Amended) The method of claim 20 wherein at least one of the one or more coating compositions is a basecoat coating composition.

23.(Currently Amended) The method of claim 20 wherein at least one of the one or more coating compositions is a clearcoat coating composition.

24.(Currently Amended) The method of claim 21 wherein the cured coated ultraviolet and thermally cured coated substrate is substantially free of surface defects resulting from vaporous substrate emissions.

25.(Original) A coated substrate made by the method of claim 14.